Amendments to the Claims

This listing of Claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (currently amended) A method of treating cancer in a human comprising administering to said human, in which such treatment is desired, a bcl-2 antisense oligonucleotide at a dose of 0.01 to 50 mg/kg daily in one or more cycles of therapy, each cycle of therapy consisting of ~~2 to 13~~ 3 to 9 days, and
wherein each cycle of therapy is separated by an interval of time wherein said human receives no bcl-2 antisense oligonucleotide, and wherein said interval of time comprises at least one day.

2. (canceled)

3. (previously presented) The method of Claim 1, wherein the one or more cycles of therapy consist of 4 to 7 days.

4. (currently amended) The method as in any of ~~Claims 1-3~~ Claim 1 or 3 comprising administering 4 to 9 mg/kg/day of the bcl-2 antisense oligonucleotide.

5. (currently amended) The method as any of ~~Claims 1-3~~ Claim 1 or 3 comprising administering 5 to 7 mg/kg/day of the bcl-2 antisense oligonucleotide.

6. (original) The method of Claim 1 comprising further administering one or more cancer therapeutics.

7. (original) The method of Claim 6 wherein administration of the cancer therapeutic follows administration of the bcl-2 antisense oligonucleotide.

8. (original) The method of Claim 6 wherein administration of the cancer therapeutic precedes administration of the bcl-2 antisense oligonucleotide.

9. (original) The method of Claim 6 wherein the cancer therapeutic is administered concurrently with the bcl-2 antisense oligonucleotide.

10. (original) The method of Claim 6 wherein said cancer therapeutic is a chemoagent, radiotherapeutic, immunotherapeutic, cancer vaccine, anti-angiogenic agent, cytokine, gene therapeutic, or hormonal agent.

11. (original) The method of Claim 10, wherein said cancer therapeutic is a chemoagent, and wherein said chemoagent is dacarbazine, docetaxel, paclitaxel, cisplatin, 5-fluorouracil, doxorubicin, etoposide, cyclophosphamide, fludarabine, irinotecan or cytosine arabinoside (Ara-C).

12. (previously presented) The method of Claim 6 or Claim 10 wherein said cancer therapeutic is administered at a dose which is below the effective dose when the cancer therapeutic is administered without the bcl-2 antisense oligonucleotide.

13. (currently amended) The method as in any of ~~Claims 1-3~~ Claim 1, 3 or 6, wherein said administration is by oral, intravenous infusion, subcutaneous injection, intramuscular injection, topical, depo injection, implantation, time-release mode, intracavitary, intranasal, inhalation, intratumor, or intraocular administration.

14. (currently amended) The method as in any of ~~Claims 1-3~~ Claim 1, 3 or 6, wherein said cancer is a cancer of the hematopoietic system, skin, bone and soft tissue, reproductive system, genitourinary system, breast, endocrine system, brain, central nervous system, peripheral nervous system, kidney, lung, respiratory system, thorax, gastrointestinal and alimentary canal, lymph nodes, pancreas, hepatobiliary system, or cancer of unknown primary site.

15. (currently amended) The method of any of ~~Claims 1-3~~ Claim 1, 3 or 6, wherein said cancer is non-Hodgkin's lymphoma, Hodgkin's lymphoma, leukemia, colon carcinoma, rectal carcinoma, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, renal cell carcinoma, heptoma, bile duct carcinoma, choriocarcinoma, cervical cancer, testicular cancer, lung carcinoma, bladder carcinoma, melanoma, head and neck cancer or brain cancer.

16. (currently amended) The method as in any of ~~Claims 1-3~~ Claim 1, 3 or 6, wherein the antisense oligonucleotide is from 10 to 40 bases in length and is complementary to the pre-mRNA or mRNA of the bcl-2 gene.

17. (original) The method of Claim 16, wherein the antisense oligonucleotide comprises at least two phosphorothioate linkages.

18. (previously presented) The method of Claim 17, wherein the antisense oligonucleotide comprises the sequence TCTCCCAGCGTGCGCCAT (SEQ ID NO: 17).

19. (currently amended) The method of treating cancer in a human comprising administering to said human, in which such treatment is desired, one or more chemoagents and a bcl-2 antisense oligonucleotide, wherein the bcl-2 antisense oligonucleotide is administered at a dose of 0.01 to 50 mg/kg/ daily in one or more cycles of therapy, each cycle consisting of ~~2 to 13~~ 3 to 9 days, and
wherein each cycle of therapy is separated by an interval of time wherein said human receives no bcl-2 antisense oligonucleotide, and wherein said interval of time comprises at least one day, and
wherein the chemoagent is dacarbazine, docetaxel, paclitaxel, cisplatin, 5-fluorouracil, doxorubicin, etoposide, cyclophosphamide, fludarabine, irinotecan or cytosine arabinoside (Ara-C), and wherein the chemoagent is administered at a dose which is below the effective dose when the chemoagent is administered without the bcl-2 oligonucleotide.

20. (previously presented) The method of Claim 19, wherein said chemoagent is paclitaxel and said dose is 10 to 135 mg/m^2/cycle.

21. (previously presented) The method of Claim 19, wherein said chemoagent is docetaxel and said dose is 6 to 60mg/m^2/cycle.

22. (previously presented) The method of Claim 19, wherein said chemoagent is fludarabine and said dose is 2.5 to 25 mg/m^2/cycle.

23. (previously presented) The method of Claim 19, wherein said chemoagent is irinotecan and said dose is 5 to 50 mg/m^2/cycle.

24-28 (canceled)

29. (currently amended) A pharmaceutical composition comprising a bcl-2 antisense oligonucleotide for administration at a dose of 0.01 to 50 mg/kg/daily for one or more cycles of therapy, each cycle of therapy consisting of ~~2 to 13~~ 3 to 9 days and wherein each cycle of therapy is separated by an interval of time wherein said human receives no bcl-2 antisense oligonucleotide, and wherein said interval of time comprises at least one day; in combination with cancer therapeutic agent for administration at a dose which is below the effective dose when the cancer therapeutic agent is administered without the bcl-2 antisense oligonucleotide; wherein said agent is dacarbazine, docetaxel, paclitaxel, cisplatin, 5-fluorouracil, doxorubicin, etoposide, cyclophosphamide, fludarabine, irinotecan or cytosine arabinoside (Ara-C); and a pharmaceutically acceptable carrier.

30. (currently amended) A pharmaceutical composition comprising a bcl-2 antisense oligonucleotide, for administration at a dose of 10 to 50 mg/kg/daily for one or more cycles of therapy, each cycle of therapy consisting of ~~2 to 13~~ 3 to 9 days and wherein each cycle of therapy is separated by an interval of time wherein said human receives no bcl-2 antisense oligonucleotide, and wherein said interval of time comprises

at least one day; in combination with a cancer therapeutic agent for administration at a dose which is below the effective dose when the cancer therapeutic agent is administered without the bcl-2 antisense oligonucleotide, wherein said agent is dacarbazine, docetaxel, paclitaxel, cisplatin, 5-fluorouracil, doxorubicin, etoposide, cyclophosphamide, fludarabine, irinotecan or cytosine arabinoside (Ara-C); and a pharmaceutically acceptable carrier.

31. (previously presented) The pharmaceutical composition of Claim 29 or Claim 30, wherein the antisense oligonucleotide is from 10 to 40 bases in length and is complementary to the pre-mRNA or mRNA of the bcl-2 gene.

32. (currently amended) The pharmaceutical composition of Claim 31, wherein the antisense oligonucleotide comprises at least two phosphorothioate linkages.

33. (previously presented) The pharmaceutical composition of Claim 32, wherein the antisense oligonucleotide comprises the sequence TCTCCCAGCGTGCGCCAT (SEQ ID NO: 17).